



Pathology Biology Section – 2003

G8 Basketball-Related Sudden Deaths in Young Adults: A Medical Examiner Study

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The goal of this presentation is to examine the cause of sudden deaths in non-professional adult athletes playing basketball.

Twenty-three cases were reviewed of sudden cardiac death of young adults who were playing or had just stopped playing basketball at the time they expired. The time period of this study was four years, 1997 to 2000. All 23 cases underwent complete autopsy and toxicologic examination at the Office of the Chief Medical Examiner (OCME) for the State of Maryland. Of all the sports-related sudden deaths examined at this office during this time period, basketball was the sport associated with most sudden deaths. This particular type of exercise may be unusually stressful for certain people. This presentation will examine why, as well as look for the anatomic basis for the sudden deaths in this population of non-professional athletes who were relatively young adults and physically active. Of the 23 cases, all were male; the average age was 30 years. The authors found that most showed evidence of at least one significant heart condition, unknown prior to autopsy. The most frequent abnormality was atherosclerotic cardiovascular disease (almost one third of the cases). Less common findings included: congenital heart disease, left ventricular hypertrophy, right ventricular dysplasia, and myocardial scarring. Of note, several deaths occurred in those who were overweight; there also appeared to be an association between the amount of obesity and left ventricular hypertrophy observed in some.

In conclusion, in the authors' population of non-professional adult athletes dying of sudden death while playing basketball, the most common cause of death was atherosclerotic cardiovascular disease.

Sudden Death, Basketball, Autopsy